

AMENDMENTS TO THE CLAIMS

Pursuant to 37 C.F.R. § 1.121, as recently revised, a listing of all claims that are, or were, in the application, is listed below. The current status of each claim is indicated in parentheses after the claim number.

1 – 30 (Canceled).

OK to enter upon revival
Jan Hammer

31. (Currently amended): A RF antenna comprising a single conductor arranged in polygonal generally spiraling form, and means for connecting the conductor to an antenna feed at or adjacent to one end of the conductor, the other end of the conductor being open-circuited, the polygonal generally spiraling form comprising successive linear sections, each forming an angle with a succeeding or preceding one, the total length of the conductor and the spacing of adjacent co-extending sections being such that the antenna exhibits resonances in a plurality of frequency bands~~An antenna as in claim 29~~, wherein opposite sides of the generally spiraling form comprise at least three major sides that are markedly non-parallel with each other.

32. (Previously presented): A RF antenna comprising a single conductor arranged in a generally spiraling form, and means for connecting the conductor to an antenna feed at or adjacent one end of the conductor, the other end of the conductor being open-circuited, wherein an envelope of the generally spiraling form comprises three, four, or five major sides that are markedly non-parallel with each other, the total length of the conductor and the spacing of adjacent co-extending sections being such that the antenna exhibits resonances in a plurality of frequency bands.

33. (Previously presented): A RF antenna comprising a single conductor arranged in a generally spiraling form, and means for connecting

the conductor to an antenna feed at or adjacent one end of the conductor, the other end of the conductor being open-circuited, an envelope of the generally spiraling form comprising three major sides disposed so as to lie in a triangular relationship, the total length of the conductor and the spacing of adjacent co-extending sections being such that the antenna exhibits resonances in a plurality of frequency bands.

34. (Previously presented): An antenna as in claim 31, wherein an end of each major side merges with an end of an adjoining major side.

35. (Previously presented): An antenna as in claim 31, wherein the lengths of and angles between the major sides are such that the antenna is linearly polarized.

36. (Previously presented): An antenna as in claim 35, wherein the aspect ratio of an overall envelope of the generally spiraling form is chosen such that the antenna has a required ratio of horizontal and vertical polarization.

37. (Previously presented): An antenna as in claim 32, wherein an overall envelope of the generally spiraling form is substantially in the shape of an equiangular triangle.

38. (Previously presented): An antenna as in claim 32, wherein an overall envelope of the generally spiraling form is substantially in the shape of an isosceles triangle.

39. (Previously presented): An antenna as in claim 38, wherein, when the antenna is disposed generally upright, a top side of the overall envelope of the spiraling form is shorter than the other two sides of the overall envelope.

40. (Canceled).

41. (Currently amended): An antenna as in claim ~~37~~57, wherein, when the antenna is disposed generally upright, from its one end the conductor is adapted to extend upwardly at an angle, then generally horizontally, then generally downwardly at an angle to a point adjacent its one end, thereby forming a first outer side, a top outer side, and a second outer side, respectively, and then to extend upwardly, horizontally, and downwardly within the outer sides to form a first inner side, a top inner side, and a second inner side, respectively.

42. (Previously presented): An antenna as in claim 41, wherein the first and top inner sides are each approximately 80% as long as the respective first and top outer sides, and wherein the spacing between the first outer side and first inner side and between the top outer side and the top inner side are each approximately 10% of the length of the first outer side.

42. (Previously presented): An antenna as in claim 42, wherein the second inner side is approximately one-third the length of the second outer side.

44. (Canceled).

45. (Currently amended): An antenna as in claim ~~29~~57, and also comprising a stub antenna extending from said one end of the conductor so as to be alongside an outermost portion of the spiraling form, the stub antenna providing a required additional frequency band.

46. (Previously presented): An antenna as in claim 41, and also comprising a stub antenna extending from the one end of the conductor so as to be alongside the first outer side.

47. (Previously presented): An antenna as in claim 46, wherein the stub antenna is approximately 40% the length of the first outer side.

48. (Previously presented): An antenna as in claim 47, wherein spacing of the stub antenna from the first outer side is approximately 10% the length of the stub antenna.

49. (Previously presented): An antenna as in claim 48, wherein the antenna has resonant frequencies at approximately 100 MHz and 220 MHz.

50 – 56 (Canceled).

57. (Previously presented): A RF antenna consisting of a single conductor wound in a spiral configuration with one end adapted to connect to an antenna feed, the spiral configuration being formed by a set of linear sections serially connected with an angle between each successive pair, at least two of the linear sections being co-extending sections with one section positioned to extend in generally the same direction as another section but inwardly of the other section on the spiral configuration, the total length of the antenna element and the spacing of the co-extending sections being such that the antenna exhibits resonances in a plurality of frequency bands.